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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/140,862	08/27/1998	JONATHAN D. ALBERT	INK-006	9214
26245	7590	03/16/2005	EXAMINER	
DAVID J COLE E INK CORPORATION 733 CONCORD AVE CAMBRIDGE, MA 02138-1002			LEWIS, DAVID LEE	
			ART UNIT	PAPER NUMBER
			2673	

DATE MAILED: 03/16/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

**Application No.**

09/140,862

**Applicant(s)**

ALBERT ET AL.

**Examiner**

David L Lewis

**Art Unit**

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-19 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 10 is/are allowed.
- 6) ☒ Claim(s) 1-9 and 11-19 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |                                                                                                                        |                                                                                         |
|------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)                                            | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. ____. |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date ____. | 6) <input type="checkbox"/> Other: ____.                                                |

## DETAILED ACTION

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

**1. Claims 1, 2, and 6 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ota (3756693) in view of Naoyuki (JP 40108611), Saxe et al. (5650872).**

**2. As in claims 1 and 2, Ota teaches of an electrophoretic display comprising: a capsule containing a suspending fluid and at least a first particle and a second particle, column 4 lines 54-67, said first particle having a first color and a first electrophoretic mobility and said second particle having a second color and a second electrophoretic mobility, column 4 lines 54-67, said capsule displaying a visual state, column 5 lines 10-16; and two electrodes disposed adjacent said capsule, figure 3 item 8 and 9, at least one of said electrodes having a color to affect said visual state of said capsule, figure 3 item 50 (wherein said color is coated on said electrode); wherein application of an electric field to said capsule by said electrodes causes said capsule to change said visual state due to at least the colors and electrophoretic mobilities of said particles, column 5 lines 16-37. Wherein materials 16 and 17 are different from each other with respect to charge polarity and optical color, where they move in directions opposite each other given an applied voltage across the display electrodes 8 and 9, and**

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therefore have substantially different mobility's due to their differing polarity and movement. Viewing OTA in the broadest interpretation of its teaching assumes the capsule containing suspending fluid and particles is formed by the enclosure 3, column 6 lines 25-30, including housing walls 4 and 5 that encapsulate the display. Encapsulation is inherent to the structure of the display system. However keeping consistent with the previous rejections, the Examiner assumes the interpretation of capsule as described by **Saxe et al. and Naoyuki et al.**, wherein further within the capsule of OTA, lies a capsule as taught by **Saxe and Naoyuki**, for the purpose of preventing coagulation of the electrophoretic particles, whereby they overcome the missing narrow interpretation of capsule not found in OTA, as found in claims 1 and 2.

3. **As in claim 6**, OTA in view of Saxe et al. and Naoyuki et al., teaches of the invention as applied above to claim 1. Further OTA teaches of said substrate, figure 3 items 4 and 5, as well as said electrodes, figure 3 items 8 and 9, being disposed between said substrate and capsule, figure 3 items 8 and 9.

4. **Claims 3-5, 7-9, 14, 15, and 19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ota (3756693) in view of Naoyuki (JP 40108611), Saxe et al. (5650872), and Ota et al. (3870517).**

5. **As in claim 3-4 and 7-9**, Ota (693) in view of Sax et al and Naoyuki et al. teaches of the invention as applied to claim 1, 2, and 6 above. Further, **as in claim 3**, Ota et al. (517) demonstrates how the two particles can be three in number and of

varying colors, column 2 lines 55-68, and since the particles can act as the primary image colorant the skilled artisan could obviously choose red, blue, and green as the particle colors well known as the prime colors in a colored spectrum display system. **As in claims 4 and 7**, Ota (517) teaches of a suspending fluid being transparent, column 4 lines 15-22, wherein colorless obviously implies transparent, column 1 lines 20-25. **As in claim 5**, Ota (517) teaches of the suspending medium being dyed, column 7 lines 15-25. **As in claims 8 and 19**, Ota (693) teaches of a color coated transparent electrode, column 8 lines 10-20, and a colored particle of optical reflective color and/or luminescent property, column 4 lines 54-67, wherein depending on the background/foreground color scheme desired the particle would obviously be the have the same optical property as the electrode to hide the particles in a non-display voltage state, column 5 lines 16-37. **As in claim 9**, Ota (517) teaches of the at least one particle being white, column 7 lines 1 7-30, wherein the colorless suspending fluid can obviously be made white by a white particle used as a dye means to achieved the desired color, figure 3a item 15. **As in claim 14**, Naoyuki teaches of wherein said substrate is reflective, figure 1 item 1, wherein glass sheets are know to be simultaneously transparent and reflective. **As in claim 15**, Ota (693) teaches of said conductive via, figure 5 item 51.

6. **Claims 11-13 and 16-18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ota (3756693) in view of Naoyuki (JP 40108611), Saxe et al. (5650872), and Yoneya et al.(5928733) and Kikuchi et al.(4704002).**

7. **As in claims 11 and 16**, Ota in view of Naoyuki and Saxe teaches of the invention as applied above to claims 1, 2, and 6. However they are silent as to wherein said two electrodes are both disposed on a same side of said capsule. Yoneya et al. teaches of an active matrix display wherein said two electrodes are both disposed on a same side of a display medium, figure 6 items 1 and 4. While Yoneya et al. teaches of an LCD type system, Kikuchi et al. teaches an electrophoretic display is a known alternative to the LCD type system and therefore said electrophoretic display alternative taught by Kikuchi would have been an obvious substitute for use with in-plane of Yoneya, as found in claims 11 and 16. **As in claims 12, 13, 17, and 18**, Yoneya teaches of a first electrode of a larger size, and a second electrode of a smaller size, figure 6 items 1 and 4, wherein area 1 is larger than area 4.

### ***Double Patenting***

8. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and, *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969). A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b). Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

9. **Claims 1-9 and 11-19** rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over **claims 1-14 of U.S. Patent No. 6664944**. Although the conflicting claims are not identical, they are not patentably distinct from each other because Claim the same electrophoretic display comprising a substrate, lat least one capsule, at least two electrodes, and voltage application.

10. **Claims 1-9 and 11-19** provisionally rejected under the judicially created doctrine of double patenting over claims 1-14 of **copending Application No. 10/701,880**. This is a provisional double patenting rejection since the conflicting claims have not yet been patented. The subject matter claimed in the instant application is fully disclosed in the referenced copending application and would be covered by any patent granted on that copending application since the referenced copending application and the instant application are claiming common subject matter, as follows: Although the conflicting claims are not identical, they are not patentably distinct from each other because Claim the same electrophoretic display comprising a substrate, lat least one capsule, at least two electrodes, and voltage application. Furthermore, there is no apparent reason why applicant would be prevented from presenting claims corresponding to those of the instant application in the other copending application. See *In re Schneller*, 397 F.2d 350, 158 USPQ 210 (CCPA 1968). See also MPEP § 804.

***Allowable Subject Matter***

11. Claim 10 is allowed as previously noted.

***Response to Arguments***

12. Applicant's arguments with respect to claims 1-9 and 11-19 have been considered but are moot in view of the new ground(s) of rejection. See rejection over Ota in view of Saxe, Naoyuki, Yoneya et al., and Kikuchi. New Double patenting rejection over US Patent #6664944 and US Patent Application SN 10/701,880, drawn to the same subject matter.

***Conclusion***

13. Any inquiry concerning this communication or earlier communications from the examiner should be directed to David L. Lewis whose telephone number is (703) 306-3026. The examiner can normally be reached on MT and TIF from 8 to 5. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Bipin Shalwala, can be reached on (703) 305-4938. Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Group receptionist whose telephone number is (703) 305-3900.

**Any response to this action should be mailed to:**

Commissioner of Patents and Trademarks  
Washington, D.C. 20231

**or faxed to:**

(703) 872-9314 (for Technology Center 2600 only)  
Hand-delivered responses should be brought to



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Crystal Park 11, 2121 Crystal Drive, Arlington, VA, Sixth Floor (Receptionist).  
Any inquiry of a general nature or relating to the status of this application or proceeding  
should be directed to the Technology Center 2600 Customer Service Office whose  
telephone number is (703) 306-0377.

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March 5, 2005



**BIPIN SHALWALA**  
SUPERVISORY PATENT EXAMINER  
TECHNOLOGY CENTER 2600